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City and County
# of San Francisco

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Public Utilities Commission

ANNUAL REPORT
1982 – 1983

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PUBLIC UTILITIES COMMISSION
CITY AND COUNTY OF SAN FRANCISCO

DIANNE FEINSTEIN, Mayor
RUDOLF NOTHENBERG, General Manager

SAN FRANCISCO
MUNICIPAL RAILWAY

HETCH HETCHY
WATER AND POWER

SAN FRANCISCO
WATER DEPARTMENT

The Honorable
Public Utilities Commission
City and County of San Francisco

In compliance with City Charter sections 3.500 and 3.501 this annual report for 1982/1983 is hereby submitted.

The Municipal Railway, Hetch Hetchy and Water Department, supported by the various PUC bureaus, seek to provide the highest level of services to their patrons and do so efficiently and well within the financial resources made available.

The hallmark of 1982/1983 is management change, new management for the PUC itself, for the Municipal Railway and for each of the supporting bureaus. The test for these new managers will be to increase the level of services by making more effective and efficient use of the resources made available to them. The question of how well we succeed in this task will be answered in the annual report and accompanying financial statements for 1983/1984 and the ensuing years.

I want to acknowledge and pay tribute here to the thousands of our dedicated employees, past and present. Those who run our public transit system, produce and deliver electric power and bring water from across the State to our homes and industries. It is they who are responsible for the good performance detailed in these pages. We owe them a debt of gratitude.

Rudolf Nothenberg
General Manager
Public Utilities Commission

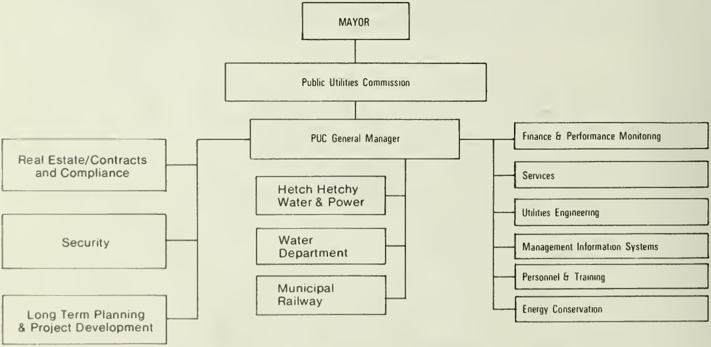
287 CITY HALL · SAN FRANCISCO, CALIFORNIA 94102 · (415) 558-4986

PUBLIC UTILITIES COMMISSION
City and County of San Francisco

Peter McCrea, *President*
Thomas Hsieh, *Vice President*
H. Welton Flynn
John M. Sanger
Nancy C. Lenvin

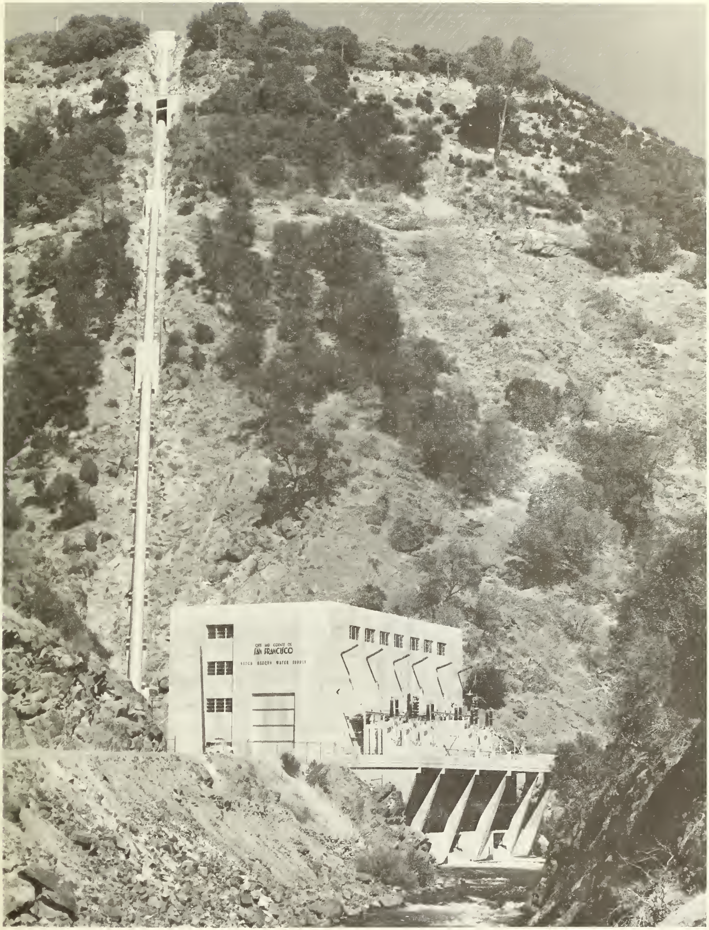
Rudolf Nothenberg, *General Manager*
Romaine A. Boldridge, *Secretary*

Dianne Feinstein
Mayor of San Francisco



Public Utilities Commission
Bureaus & Operating Departments

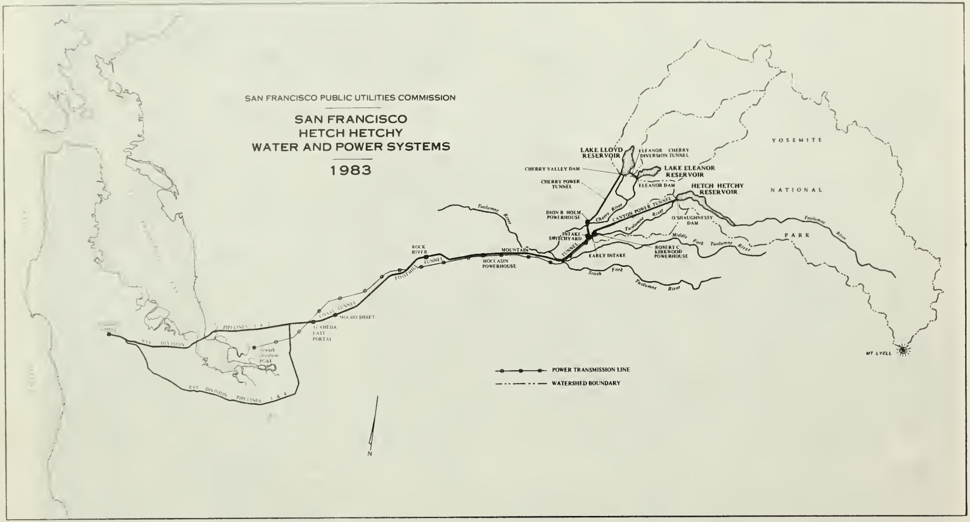
MAYOR
Public Utilities Commission
PUC General Manager
Real Estate/Contracts and Compliance
Security
Long Term Planning & Project Development
Hetch Hetchy Water & Power
Water Department
Municipal Railway
Finance & Performance Monitoring
Services
Utilities Engineering
Management Information Systems
Personnel & Training
Energy Conservation


CITY AND COUNTY OF
SAN FRANCISCO
HETCH HETCHY WATER SUPPLY

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

SAN FRANCISCO
HETCH HETCHY
WATER AND POWER SYSTEMS

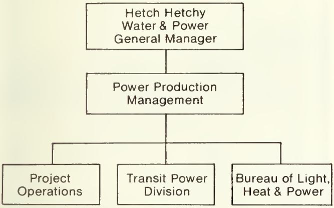
1983



Hetch Hetchy Water and Power

Hetch Hetchy manages the transstate water and power system to meet San Francisco's demands for domestic water and hydroelectric power, carries out Municipal Railway's electrical power and overhead line maintenance functions and maintains the City-owned street lighting system.

Hetch Hetchy Water & Power
ORGANIZATION CHART


Hetch Hetchy Water & Power General Manager
Power Production Management
Project Operations
Transit Power Division
Bureau of Light, Heat & Power

Dean W. Coffey, *General Manager*

STAFF

Theodore L. Chung, *Manager, Power Production*
Gary L. Hislop, *Superintendent, Project Operations*
Raymond A. Protti, *Superintendent, Power and Plant*
Joe F. De Graca, *Director of Light, Heat and Power*

The Hetch Hetchy Water and Power system collects water from the Tuolumne River in the High Sierra and uses it to supply over one-half of the Water Department's domestic and suburban water deliveries and for power generation. (Local Water Department catchment areas in the San Mateo and Alameda County watersheds currently produce less than one-half of San Francisco's needs for domestic and suburban water delivery.)

The source of the Tuolumne is the perpetual glacier on 13,090 foot Mt. Lyell. Over 90% of the watershed is above 6,000 feet, consisting of rugged granite mountainside, largely without soil or vegetation, and forming an ideal watershed.

The Hetch Hetchy water system collects runoff in three storage reservoirs:

Hetch Hetchy Reservoir on the Tuolumne River –
459 square mile watershed –
capacity 360,360 acre feet

Lake Lloyd on the Cherry River –
(tributary to the Tuolumne)
114 square mile watershed –
capacity 268,800 square feet

Lake Eleanor on Eleanor Creek –
(tributary to the Tuolumne)
79 square mile watershed –
capacity 27,100 acre feet

Note: One acre foot is the volume which covers an acre (43,560 square feet) to a depth of one foot. It contains 325,851 gallons.

Hetch Hetchy water is drawn upon mainly for domestic supply of San Francisco and neighboring suburban communities. Moving by gravity flow through tunnels and pipelines, Hetch Hetchy water produces electricity at the Robert C. Kirkwood Powerhouse and again, downstream, at the Mocassin Powerhouse.

Water from Lake Lloyd and Lake Eleanor generates electrical energy at the Dion R. Holm Powerhouse. It is then released downstream to the New Don Pedro Reservoir to satisfy the Raker Act entitlements of the Modesto and Turlock Irrigation Districts.

The Hetch Hetchy Aqueduct flow is entirely by gravity, through tunnels and pipelines. It is a system in which the high quality Sierra water is completely

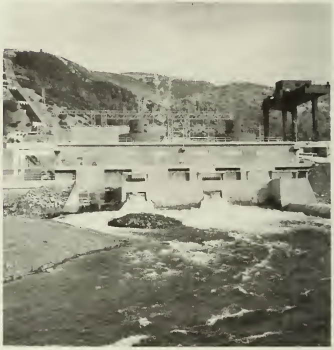
enclosed and protected for the 122 mile length of the aqueduct, before delivery to the San Francisco Water Department at Alameda East Portal in Alameda County.

During Fiscal Year 1982/1983, Hetch Hetchy delivered an average of 141 million gallons per day, (an annual 51.4 billion gallons or 157,795 acre feet) to the San Francisco Water Department. This water volume represented 57% of San Francisco's total customer consumption. (The balance of San Francisco's needs was produced by the Water Department's local Peninsula and Alameda watersheds). An additional 230 million gallons (706 acre feet) were delivered at the Coast Range Tunnel Mocho Shaft to the Lawrence Livermore National Laboratory. Groveland Community Services District in Tuolumne County received 90 million gallons (276 acre feet) from the Mountain Tunnel.

For the fiscal year, net electrical production from the three powerhouses was 2,341 million kilowatthours, of which 599 million kilowatthours, or over 25% of net production, went to satisfy needs of San Francisco municipal departments, including the Municipal Railway and street lighting. The balance was sold to Modesto and Turlock Irrigation Districts and seven industrial customers for a total of $77.58 million — providing $31.5 million for the San Francisco General Fund.

The Bureau of Light, Heat and Power continues to operate through Hetch Hetchy. This bureau combines service functions providing utilities services for municipal purposes with operating functions providing public street lighting.

A total of 598,853,223 kilowatthours of Hetch Hetchy generated electricity, valued at over $24 million, was delivered to all municipal accounts last year, while the Pacific Gas and Electric Company, under contract, supplied 17,008,946 therms of natural gas and 258,600 pounds of steam valued at over $9.4 million. Total number of City owned and PG&E owned street lights at fiscal year's end rose to 38,324.



HETCH HETCHY WATER AND POWER

Net Electrical Production and San Francisco Municipal Uses (KWH)

Month	Moccasin	Holm	Kirkwood	TOTAL NET	City Use	% of Total
July 1982	45,511,500	100,741,740	62,654,070	208,907,310	48,047,510	23.0
August	45,269,500	69,715,820	62,715,000	177,700,320	48,815,626	27.5
September	44,094,100	66,934,910	60,314,000	171,343,010	49,752,660	29.0
October	45,365,700	72,212,280	60,419,520	177,997,500	49,039,864	27.6
November	44,124,800	94,335,100	58,844,280	197,304,180	50,702,195	25.7
December	45,977,100	107,523,710	60,662,970	214,163,780	52,940,313	24.7
January 1983	44,674,700	74,130,130	60,603,980	179,408,810	50,290,414	28.0
February	41,152,600	78,224,590	54,744,700	174,121,890	47,628,678	27.4
March	45,937,600	106,892,650	60,684,770	213,515,020	51,917,451	24.3
April	44,097,700	103,199,400	58,649,500	205,946,600	48,051,014	23.3
May	45,397,100	107,173,270	59,055,180	211,625,550	50,388,069	23.8
June	44,162,500	105,482,060	58,903,500	208,548,060	51,269,429	24.6
Year's Total	535,764,900	1,086,565,650	718,251,470	2,340,582,030	598,853,223	25.6

San Francisco Water Department

The Water Department delivers safe, potable water in adequate quantity to all consumers, maintains all aspects of San Francisco's Bay Area water storage and distribution, conducting all department operations efficiently and economically.

Eugene Kelleher
General Manager and Chief Engineer

STAFF

Raymond Quan
Senior Engineer, Resources & Planning
Robert Vasconcellos
Manager Commercial Division
George Nakagaki
Manager, City Distribution System
Harry W. Tracy
Manager, Water Quality Division
Gilbert Bendix
Manager, Suburban Operations
Edward Fonseca
Assistant Manager, Peninsula Division
Tandy Carter
Assistant Manager, Alameda Division

The Water Department collects and delivers safe, potable water in adequate quantity, while complying with all applicable federal and state water quality and public safety regulations. The department charges and collects equitably for services rendered. It provides for present needs and future requirements through continuous planning and improvements.

As a San Francisco municipal utility, the Water Department assumed these obligations on March 3, 1930, after San Franciscans adopted a $41 million bond issue to buy the properties, facilities and service areas of the Spring Valley Water Company. At that time, Spring Valley had some 700,000 customers and delivered an average of 52 million gallons of water a day—49 million gallons in the City and the balance in the suburbs.

Today, some 1.75 million customers use over 240 million gallons daily. More than 150 million gallons of that goes to most of urban San Mateo County; Palo Alto, Mountain View, Sunnyvale and Milpitas in Santa Clara County; and the Hayward, Sunol and Fremont areas of Alameda County.

For the fiscal year 1982/1983, San Francisco water consumption is the same as last year. Suburban use shows a 0.5% decrease. System wide consumption is 92% of the pre-drought (1975/1976) use.

Within the 500 square mile service area of San Francisco, San Mateo, Santa Clara and Alameda Counties, the Water Department owns 63,000 acres of watershed and other lands making it one of the Bay Area's largest land owners.

The Golden Gate National Recreation Area administers U.S. Department of Interior easements in the 23,000 acre San Mateo County watershed—a 19,000 acre scenic easement at the westerly side and a 4,000 acre scenic and recreation easement at the easterly side.

Municipal storage and delivery services within the City and County are handled by the City Distribution Division. Peninsula and Alameda operations and facilities are overseen by the Suburban Division in Millbrae. Customer services and billings are handled by the Commercial Division. Water treatment standards are controlled by the Water Quality Division in Millbrae.

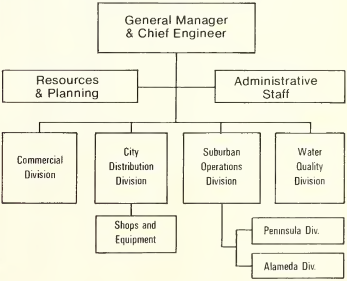
Like the Hetch Hetchy System, the Water Department is financially self-supporting. All operations, maintenance, improvements, taxes and bond redemption, to include the original bonds to purchase Spring Valley, are paid out of operating revenue from water sales.

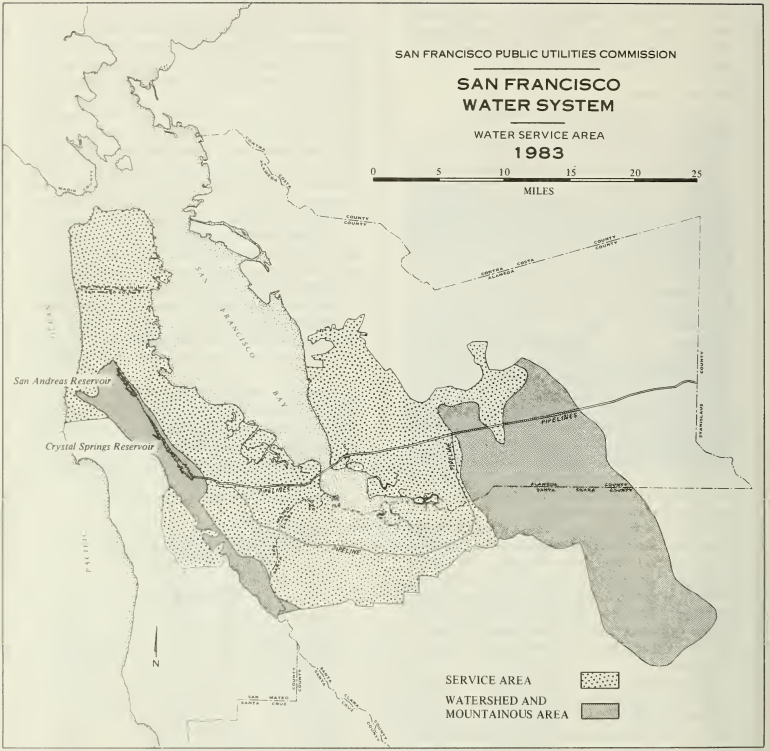
Water rates today are among the lowest in California. Local tax dependent municipal departments receive water services at no charge from the Water Department.

The Water Department operates and maintains five suburban reservoirs with storage capacity of 77,797 million gallons of water (238,750 acre feet):

- Calaveras–Santa Clara/Alameda–96,850 acre feet
- San Antonio–Alameda–50,500 acre feet
- Crystal Springs–San Mateo–69,300 acre feet
- San Andreas–San Mateo–19,00 acre feet
- Pilarcitos–San Mateo–3,100 acre feet

San Francisco Water Department
ORGANIZATION CHART




SAN FRANCISCO PUBLIC UTILITIES COMMISSION
SAN FRANCISCO WATER SYSTEM
WATER SERVICE AREA
1983
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20
25
MILES
MARIN COUNTY
CONTRA COSTA
ALAMEDA
COUNTY
COUNTY
CONTRA COSTA
ALAMEDA
COUNTY
COUNTY
SAN FRANCISCO BAY
OCEAN
PACIFIC
San Andreas Reservoir
Crystal Springs Reservoir
PIPELINES
PIPELINES
PIPELINE
PIPELINE
ALAMEDA
SANTA CLARA
COUNTY
COUNTY
STANISLAUS COUNTY
SAN MATEO
SANTA CRUZ
COUNTY
COUNTY
SANTA CLARA
SANTA CRUZ
COUNTY
COUNTY
N
SERVICE AREA
WATERSHED AND MOUNTAINOUS AREA

The 12 municipal reservoirs within the City hold 413 million gallons (1,267.5 acre feet) and there is an emergency supply of 2,565 million gallons (7,871.7 acre feet) in Lake Merced.

Water is moved from the suburban reservoirs to the City Distribution System through 233 miles of transmission mains. Deliveries to City and suburban consumers are handled by 1,179 miles of distribution lines and are monitored by 163,000 water meters.

The land management program provides for reforesting, erosion control, recreation and commercial use of the 63,000 watershed acres in Alameda, Contra Costa, Santa Clara and San Mateo Counties.

During the fiscal year, the average daily consumption of water came to 244 million gallons. The Sunol Filtration Plant produced an average of 65 million gallons per day from the Calaveras and San Antonio reservoirs and watersheds. The San Andreas Filtration Plant averaged 48 million gallons per day from the San Mateo County lakes and watersheds. The balance of San Francisco's needs was met by bringing in an average of 141 million gallons from the Hetch Hetchy System daily.

Net paying sales for the fiscal year showed a 0.6% increase to $41,557,80. At year's end, the suburban reservoirs held about 68.9 billion gallons of water, or some 89% of capacity.

In conjunction with the Cable Car Reconstruction Program, the Water Department effected 101 water main connections and 183 service connections along the cable car routes. In all 25,000 feet of new water mains were installed under both Cable Car Reconstruction contracts and Water Department contracts.

The Water Quality Division controls system quality and required treatment at its recently completed laboratory facilities in the Suburban Headquarters in Millbrae. Meeting increasingly rigid state and federal standards, and being monitored regularly by the State Health Department, the Division now supervises the operations and output of two modern filtration plants: the Sunol Valley Plant in Alameda County and the San Andreas Plant west of Millbrae in San Mateo County. Sunol has a maximum production capacity of 160 million gallons daily, while the normal capacity of San Andreas is 40 million gallons daily with a peak capacity of double that amount.

In the history of the San Francisco Water Department, its supply has never been the cause of a waterborne disease. The Water Quality Division staff assures that the Department's customers always secure water of the highest quality.

San Francisco Water Department
Average Monthly Production and Consumption

Month	Suburban Reservoir Level (000,000 gallons)	Filter Plant Production Sunol (MGD)	Filter Plant Production San Andreas (MGD)	Hetch Hetchy Import (MGD)	System Consumption (MGD)
June 1983	68,887	73.6	30.0	226.3	314.0
May	71,699	69.3	26.1	141.5	155.7
April	72,373	57.8	45.9	123.4	218.9
March	73,997	40.3	48.6	124.4	197.9
February	74,014	64.6	48.1	104.2	192.4
January	68,493	57.3	46.7	116.6	192.1
Dec 1982	57,026	79.5	47.8	79.0	186.7
November	53,644	91.9	28.4	81.5	190.7
October	52,181	86.7	59.8	106.0	244.8
September	56,161	76.3	63.1	160.3	281.5
August	60,226	55.1	69.9	194.3	327.9
July	64,477	30.4	67.9	230.8	326.1
Annual Average	64,431	65.2	48.5	140.7	244.1

San Francisco Water Department & Hetch Hetchy Project
COMBINED BALANCE SHEET
Years ended June 30, 1983 and 1982

ASSETS	1983	1982
Property, plant and equipment:		
Utility plant:		
Water	$385,633,584	$378,991,658
Power	135,369,259	121,614,180
Joint	105,925,309	104,924,668
Other	435,991	417,568
Total utility plant	627,364,143	605,948,074
Accumulated depreciation	(219,845,125)	(210,549,379)
	407,519,018	395,398,695
Construction in progress	17,692,790	16,920,563
Net property, plant & equipment	425,211,808	412,319,258
Restricted funds		
Cash and investments	16,298,118	9,009,443
Interfund accounts receivable	355	355
	16,298,473	9,009,798
Currents assets:		
Cash – principally equity in cash and investments of City treasurer	140,690,337	95,484,322
Accounts receivable:		
Water and power	9,982,569	15,779,992
Rentals, claims and other	181,318	185,395
	10,163,887	15,965,387
Allowance for doubtful accounts	(107,042)	(277,577)
	10,056,845	15,687,810
Grants receivable	3,019,827	1,100,619
Interfund accounts receivable: General City departments and funds	9,688,187	13,325,975
Public service departments	5,469	1,229
Materials and supplies – at the lower of average cost or market	1,498,973	1,186,147
Unbilled costs or deposits on work orders for other City departments	161,184	162,466
Total current assets	165,120,822	126,948,568
	$606,631,103	$548,277,624

CAPITALIZATION AND LIABILITIES	1983	1982
Net capital investment	$537,214,237	$461,901,607
Long-term debt	47,930,00	45,270,000
	585,144,237	507,171,607
Current liabilities:		
Current portion of long-term debt	8,415,000	7,480,000
Accrued interest payable	707,310	616,513
Accrued vacation payable	1,914,516	1,810,594
Accounts payable	3,573,119	5,524,110
Accrued payroll	1,066,344	1,016,136
Retained percentages due contractors	660,888	722,519
Interfund payables:		
General City departments and funds	2,899,948	22,174,069
Public service departments	23,843	49,307
Damage and claim liability	525,000	295,000
Total current liabilities	19,785,968	39,688,248
Litigation, contingent liabilities and commitments	–	–
Deposits and construction advances	1,700,898	1,417,769
	$606,631,103	$548,277,624

San Francisco Water Department & Hetch Hetchy Project
COMBINED STATEMENT OF INCOME
Years ended June 30, 1983 and 1982

	1983	1982
Operating revenues:		
Water	$43,835,234	$44,296,582
Electricity	76,216,135	71,083,268
Total operating revenues	120,051,369	115,379,850
Operating expenses:		
Purchased power and energy	4,077,415	20,369,244
Transmission and distribution	11,788,597	12,792,897
Operation and maintenance	15,859,570	13,723,651
General and administrative	17,019,954	18,207,449
Depreciation	9,600,862	8,619,326
Property taxes	1,852,608	1,664,091
Total operating expenses	60,199,006	75,376,658
Operating income	59,852,363	40,003,192
Other income:		
Rental income and crop sales, net of expense	1,932,605	1,682,328
Interest	17,810,473	16,113,773
Other	2,013,167	1,603,302
	21,756,245	19,399,403
Other expenses:		
Interest expense	2,359,186	2,481,453
Operation of Municipal Railway overhead line	2,586,359	2,289,718
	16,810,700	14,628,232
Income before operating transfers (carried forward)	76,663,063	54,631,424
Operating transfers from (to) City and County of San Francisco:		
Tax support	9,748,449	10,393,002
General Fund	(25,033,449)	(27,993,002)
	(15,285,000)	(17,600,000)
Net income	$61,378,063	$37,031,424

31 Balboa Ferries
30
GRUMMAN
4040

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4152
Gallo Italian Dry Salame

Municipal Railway

Municipal Railway schedules, manages, coordinates and controls transit access to all areas of the City and conducts operator training and operator support programs to reduce accidents, improve headway adherence and passenger satisfaction; performs efficient quality maintenance to meet vehicle availability requirements and reliability standards and; efficiently and effectively maintains transit buildings, grounds, track and signal systems to support transit service delivery.

Harold Geissenheimer, *General Manager*

STAFF

James Isenberg
Assistant to the General Manager
Richard Sinigiani
Deputy General Manager, Operations
Ann Branston
Deputy General Manager, Equipment Maintenance
Ed W. Pearson
Deputy General Manager, Facilities Maintenance
Manager, Field Operations
George Newkirk
Manager, Field Support
Dianne Nygaard
Manager, Training
Jeff Johnson
Manager, Diesel Vehicle Maintenance
Rich Rogers
Manager, Electrical Vehicle Maintenance
Al Walter
Manager, Ways and Structures Maintenance
Peter Straus
Director, Planning
Carl Barton
Director, Systems Safety
Angelo P. Figone
Director, Schedule Preparation and Analysis
Jaimie Levin
Director, Community Affairs

The Municipal Railway meets San Francisco's public transit needs and is one of the three operating departments of the Public Utilities Commission. Its major objective is to provide convenient, safe and economical public transportation service for the people it serves by scheduling service around the clock every day of the year.

Service is provided in four transit modes – Metro light rail vehicle, electric trolley coach, diesel motor coach and cable car. During 1982, the last of the PCC streetcars was replaced by light rail vehicles (LRV) and retired from active revenue service. Fiscal year 1982/1983, marks the third year of seasonal service by historic streetcars on Market Street.

Historic Development of Municipal Transit

The Municipal Railway started operations in 1912, the first city-owned public transit system in the United States. A $2 million bond issue approved by the citizens in 1909 started municipal transit operations with the purchase of the privately owned Geary Street Railroad. New transit services were immediately initiated to the developing Harbor View and North Beach areas.

By 1915, Municipal Railway had grown from a single line and six miles of track to over 42 miles of track with a fleet of 197 streetcars. Service areas were the Richmond, Marina, North Beach and Potrero Districts of the City.

By 1925, streetcar service had been extended to the Mission, West Twin Peaks and Sunset Districts.

Municipal Railway pioneered using motor coaches for public transit by introducing the gasoline powered vehicles on two feeder lines in 1918. Motor coach service expanded the M and L lines in 1926.

Operations of the City's public transit railway and motor coach lines were consolidated in 1944, when Municipal Railway acquired the Market Street Railway Company. The California Street Cable Car Railway was brought into the system in 1952, completing public transportation consolidation in San Francisco.

The System Today

After seven decades of acquisition, development and operation, the Municipal Railway has amassed vast experience. As a City-owned public transit system it can be characterized as singularly service intensive.

Public transit is provided 24 hours a day, seven days a week. All 79 lines, averaging 936 route miles daily within San Francisco's 49 square miles, operate between 5 a.m. and 1 a.m. Between 1 a.m. and 5 a.m., 13 "Owl" routes are in service. Service frequencies range from 2 to 15 minutes during peak travel times, while off-peak travel periods see service frequencies of 3 to 30 minutes.

During the year, the Municipal Railway fleet of 1,086 transit vehicles logged over 27 million revenue vehicle miles carrying 293 million passengers. System average for the 79 transit routes is 803,000 passenger boardings daily, one of the highest municipal transit system per capita riderships in the United States.

A recent addition to the Municipal Railway is the Metro system of five lines which operate underground for the length of Market Street and on the surface after leaving Market Street and the Twin Peaks Tunnel.

During fiscal year 1982/1983, Metro service expanded to a seven-day-a-week operation, concluding a highly successful four-year management program to bring the $300 million Metro system to full operation. "Trainlining" became routine. This is the technique of coupling two to four Metro LRVs into one subway train with one or two operators. Trainlining allows more trains to use the subway more often, with resultant increased service levels for passengers to and from the downtown area.

Significant Actions, 1982/1983

Based on a comprehensive study evaluating the Municipal Railway's long range vehicle needs and potential funding sources (to finance a multi-million dollar procurement program), a decision was reached by PUC management, in mid-1982, to purchase new standard-sized and articulated diesel coaches for the motor coach fleet. Soon afterwards, a funding source was secured by management and and agreement signed with Flyer Indutries in January to purchase 110 standard-sized diesel coaches. Later, that number was increased to 180.

Also, during January, following a one year planning study, the Public Utilities Commission and Municipal Railway staff held public meetings in San Francisco neighborhoods to receive public comments on proposed service improvements. Neighborhood concerns were incorporated into a revised set of proposals that were adopted by the Commission on March 8, to be effective August 24. The approved proposal modifies and improves service on 15 new routes. As a result, the service areas have been expanded and the frequencies of service for the affected areas have been increased.

Organization

During this past year, management completed a major reorganization of Municipal Railway under a program started in 1979, aimed at improving the organizational structure and performance of several key divisions. This program led to the successful hiring of many new management personnel. As a result, the Railway is now organized around three major functional reas – Equipment Maintenance, Facilities Maintenance, and Operations – each headed by a deputy general manager.

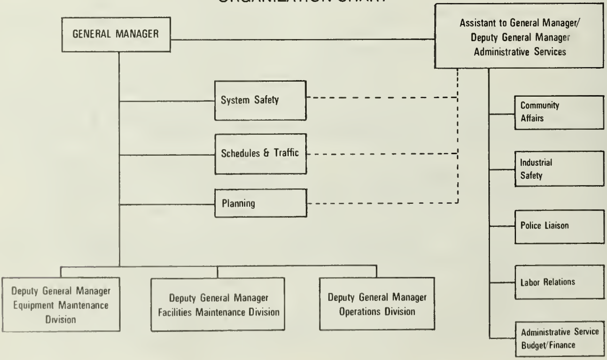
Equipment Maintenance

Meeting vehicle availability requirements and reliability standards by efficiently performing quality maintenance remains the major objective of this division. During 1982/1983, the division attempted to stabilize the maintenance situation for the entire Municipal Railway fleet.

The 345 vehicle trolley coach fleet performed well, being above target with 93% availability and exceeding minimum reliability requirements by 15%. Trolley coach reliability was increased during the latter half of the year when the 640 miles between road calls (MBR) experienced in December ws improved 54% to 986 MBR by year's end.

Of the 517 vehicle diesel coach fleet, 391 are some 14 years old and the efforts of 250 diesel mechanics

San Francisco Municipal Railway
ORGANIZATION CHART


GENERAL MANAGER
Assistant to General Manager/ Deputy General Manager Administrative Services
System Safety
Schedules & Traffic
Planning
Community Affairs
Industrial Safety
Police Liaison
Labor Relations
Administrative Service Budget/Finance
Deputy General Manager Equipment Maintenance Division
Deputy General Manager Facilities Maintenance Division
Deputy General Manager Operations Division

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brought vehicle reliability to 80% of requirements. Of the 149 fourteen-year-old, General Motors coaches scheduled for rehabilitation last year, 75 were completed and returned to revenue operations. The remaining 74 coaches will be complete and ready for service next year.

During the Spring of 1984, the Railway is scheduled to receive the first of 180 new Flyer coaches. The infusion of new and rehabilitated transit motor coaches, together with intensified maintenance efforts, will allow the motor coach fleet to meet all availability targets and exceed vehicle reliability requirements to result in no missed runs and minimum service interruptions.

The 100 LRV fleet providing service in the Metro System will be supplemented shortly with an additional 30 cars. These will be used to increase reliability and relieve the peak-hour crush. The current equipment has caused concern, but improvements are being made to make these vehicles more durable and less prone to operational difficulties.

Door and brake malfunctions have been identified as major operational problems. During 1983 a retrofit program on these components was started.

Although hampered by the shortage of mechanics and the need for basic modifications to the LRV's, Equipment Maintenance kept LRV reliability several percentage points above the targeted 800 miles per defect and is meeting all major scheduled maintenance inspections.

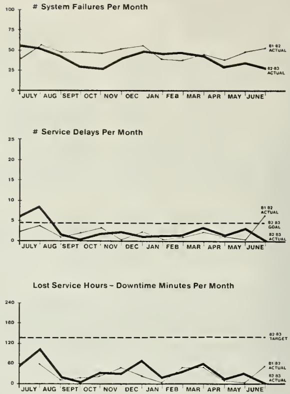
When the Cable Car Reconstruction Program started in October, the 44 cable cars were removed to Pier 70 storage. Four were mounted at static display locations for public view during the reconstruction period. Equipment Maintenance is refurbishing the individual cars before their return to service next year.

The fleet of 74 PCC streetcars was removed from revenue service during September and replaced by the LRV service of the Metro System. Pending their potential use on the proposed E-Embarcadero and F-Market line, 53 of the cars are being held in inventory. Two were reconditioned and returned to Market Street surface service as part of the Historic Trolley Festival.

Facilities Maintenance

The Municpal Railway has eight storage and maintenance facilities at various locations throughout the City. Each facility has been designed or modified to house and maintain a specific vehicle mode — motor coaches at Woods and Kirkland — trolley coaches at Potrero and Presidio — light rail vehicles in Metro and Geneva yards — cable cars at Washington and Mason (temporarily stored at Pier 70) — and non-revenue vehicles at 24th Street Shops. Other fixed assets and their maintenance include tracks, subway tunnels and signal systems, cable car machinery, cable system track and switches, transit shelters and transit signs.

FACILITIES RELIABILTY FY 1982-83
METRO SIGNAL AND SWITCH SYSTEM



Operations

Operations determines how many operators are required to provide scheduled service, trains the operators, manages all support services required to deliver scheduled service, and manages all operators and vehicles while they are in revenue service. As a result of a major reorganization of this division during 1982, several new operating units were created to manage the delivery of transit services more efficiently.

The Field Support Unit is responsible for operators prior to revenue service and insures that operators are assigned and used efficiently.

The Field Operations Unit is responsible for supervising revenue service — the day by day operations of the public transit system.

The Training Unit instructs the number of operators required to meet schedule needs and maintains trained operator quality.

An effective system has been established of determining the number of operators needed to fill scheduled runs and deploying extra board operators to cover runs missed due to absence. As a result, the operator availability rate has been increased significantly, with equivalent reductions in missed service hours and operator overtime pay.

Operator training has also been reorganized, resulting from a major management study completed in 1982, to provide timely refresher training for all operators. New operator training occurs on a timely basis and new trainees are screened through California Highway Patrol records to insure hiring safe and responsible drivers.

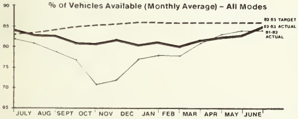
Results of the 1982-1983 program include target transit lines reporting a 17% increase in the number of trips operating within one minute of scheduled headway — a smaller but significant increase in service reliability system wide — and a reduction of 11% in the accident rate.

Operations participates in the Joint Labor Management Board, an innovative labor relations program initiated by Municipal Railway in 1982. The Board has committees for operator health, morale, safety, and deficiencies identified at Railway operating divisions. A five year plan, detailing programs, resources, priorities and time schedules is being produced. Successful negotiations with Locals 200 and 250A of the Transport Workers Union were completed in the summer of 1982, achieving the Railway's first multi-year labor contract.

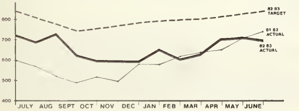
Planning develops and modifies transit routes and adjusts route alignments to provide maximal service while achieving economy. Planning evaluates transit services in terms of route performance and service levels.

Schedules and Traffic allocates and assigns operator personnel to individual transit line runs, modifies service frequencies as necessary to balance service load requirements, assigns revenue transit vehicles to provide required service frequencies for line routes and conducts checks of service and passengers to determine service adequacy and need for route or frequency modification.

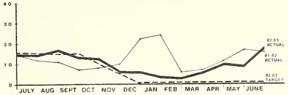
EQUIPMENT AVAILABILITY FY 1982-83
% of Vehicles Available (Monthly Average) – All Modes



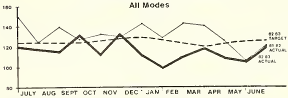
EQUIPMENT RELIABILITY FY 1982-83
Average # of Miles Per Defect (Monthly) – All Modes



OPERATOR MISSED SERVICE FY 1982-83
% of Service Hours Missed – All Modes



TRAFFIC ACCIDENTS FY 1982-83
# Per Million Miles (Monthly Average)
All Modes



Systems and Safety Assurance evaluates planned purchases of facilities and equipment, monitors current facilities and equipment, investigates accidents or incidents, and provides safe performance review for equipment and facility modifications to eliminate or reduce hazards.

Now reporting through the Municipal Railway during this past year, Community Affairs produced and distributed more than 120,000 maps of the Railway service system, responded to over 100,000 telephone inquiries per month, processed commendations and complaints and conducted press conferences. Community Affairs developed Municipal Railway's Transit Advertising Contract which was awarded to The Winston Network Company. This contract will generate more than $1.5 million annually through 1987 for the Municipal Railway Operating Fund.

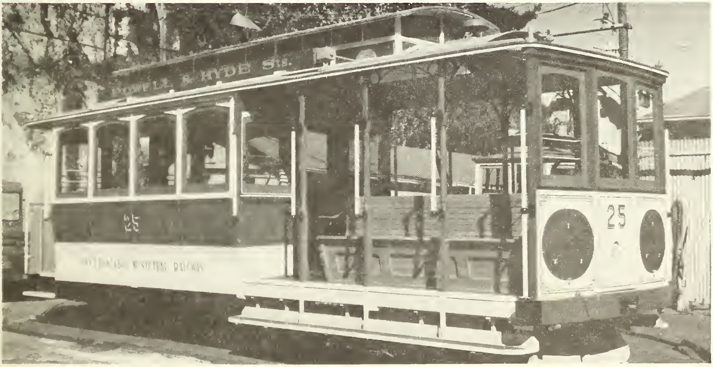
In conjunction with Municipal Railway Planning, Community Affairs successfully organized a major outreach program to San Francisco neighborhoods for the public meetings concerning proposed changes to 15 service lines. As a result, sufficient valuable, constructive citizen input was generated to insure that the proposed route changes would provide maximal benefit for the neighborhood served.

San Francisco Municipal Railway and
San Francisco Municipal Railway Improvement Corporation
COMBINED BALANCE SHEET
Years Ended June 30, 1983 and 1982

ASSETS

	1983	1982
Current assets:		
Cash	$133,868	$133,868
Equity in cash and investments of the City Treasurer	30,140,691	–
Receivables:		
Grants	12,526,074	16,444,501
State returned sales tax	4,554,000	11,069,000
Interentity – General City and County departments and funds	535,904	5,736,768
Miscellaneous	297,692	392,646
	17,913,670	33,642,915
Materials and supplies	6,821,060	7,083,542
Total current assets	55,009,289	40,860,325
Restricted assets		
Cash and short-term investments held by trustee	39,193,658	35,660,392
Interest receivable	453,072	635,198
	39,646,730	36,295,590
Property, plant and equipment:		
Land	1,189,075	1,189,075
Roads and structures	110,223,355	99,358,751
Equipment	122,767,431	111,956,368
Power	1,290,890	2,515,329
Construction in progress	45,976,483	23,378,232
	281,447,234	238,397,232
		238,397,755
Less accumulated depreciation	(76,081,933)	(70,214,661)
	205,365,301	168,183,094
	$300,021,320	$245,339,009

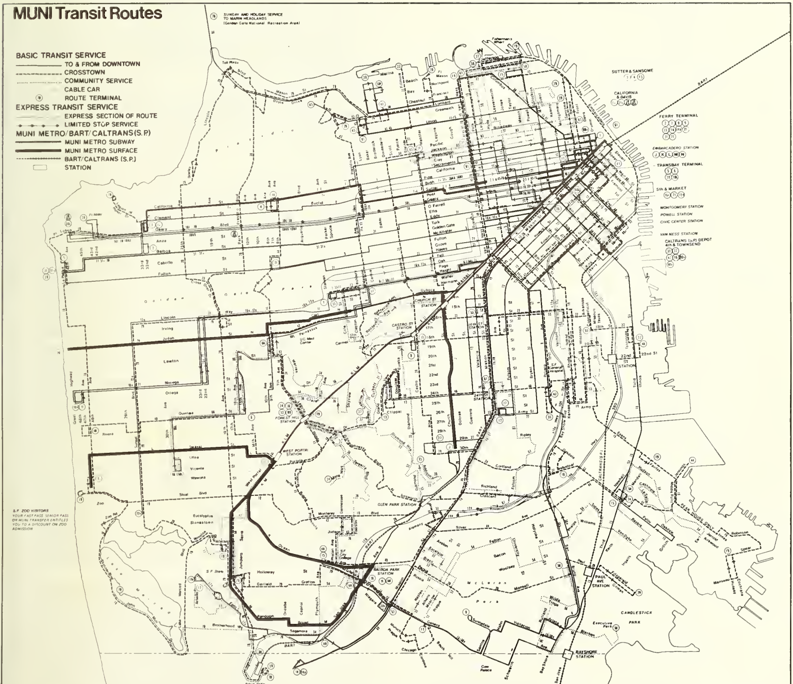
	1983	1982
LIABILITIES AND FUND EQUITY		
Current liabilities:		
Deficit in cash and investments of City Treasurer	–	14,261,003
Accounts payable and accrued expenses:		
Vouchers payable	11,684,125	5,450,262
Accrued expenses	14,536,510	11,346,925
Interentity: General City and County departments and funds	11,600,921	8,046,358
Public service departments	–	219,903
	37,821,556	25,063,448
Accident claims liability	12,120,500	12,120,500
Current portion of bonds payable	2,085,000	2,025,000
Total current liabilities	52,027,056	53,469,951
Restricted liabilities		
Accounts payable and accrued liabilities	1,782,429	1,157,510
Bonds payable	29,115,000	31,140,000
Less current portion	2,085,000	2,025,000
	27,030,000	29,115,000
Commitments and contingent liabilities	–	–
Fund equity:		
Contributed capital	277,793,542	210,658,412
Accumulated deficit	(58,611,707)	(49,061,864)
Total fund equity	219,181,835	161,596,548
	$300,021,320	$245,339,009



San Francisco Municipal Railway and
San Francisco Municipal Railway Improvement Corporation
COMBINED STATEMENT OF LOSS
Years ended June 30, 1983 and 1982

	1983	1982
Operating revenues:		
Passenger	$51,186,220	$46,468,345
Advertising	642,879	687,142
Miscellaneous	902	8,681
	51,830,001	47,164,168
Operating expenses:		
Maintenance and repairs – ways and structures	12,448,666	10,193,749
Maintenance and repairs – equipment	34,593,837	31,233,417
Conducting transportation	93,730,565	90,247,638
General and administrative	24,926,568	21,163,550
Depreciation	9,549,843	9,660,425
	175,249,479	162,498,779
Loss from operations	123,419,478	115,334,611
Non-operating revenues and (expenses):		
Contributions received : Metropolitan Transportation Commission:		
Transportation Development Act funds – operating portion	14,919,689	12,006,650
State Transit Assistance funds – operating portion	4,603,861	–
Bridge toll funds	2,505,491	2,285,643
Federal operating assistance	6,700,000	14,080,170
State returned sales tax	10,100,000	14,244,000
Other	–	95,238
Interest income	3,883,871	5,540,138
Interest expense	(1,955,664)	(2,084,287)
Other income, net	158,924	139,429
Loss on cable car project	(1,591,849)	–
	39,324,323	46,306,981
Loss before operating transfers	84,095,155	69,027,630
Operating transfers: From City and County of San Francisco		
Tax support	69,795,312	54,042,205
Revenue sharing	4,750,000	5,325,000
	74,545,312	59,367,205
Net Loss	$9,549,843	$9,660,425

MUNI Transit Routes



Public Utilities Commission

Supporting Bureaus

Office of the General Manager
Mathea Falco
Real Estate/Contracts and Compliance
Chuck Richardson
Security
Doug Wright
Long Term Planning and Project Development

Supporting Bureaus
Andrea Gourdine
Personnel and Training
Leo Jed
Utilities Engineering
Tom Jordan
Services
Anson Moran
Finance and Performance Monitoring
Barbara Moy
Energy Conservation
Hans Loffeld, *Management Information Systems*

Public Utilities Commission operating departments are directly supported by special function services and bureaus.

Within the office of the General Manager, PUC, special services provided include:

Real Estate/Contracts and Compliance which reviews contracts for PUC departments and bureaus to insure compliance with City and PUC requirements, manages rental of Water Department lands — involving 1,838 permits and 97 leases which produced $1,687,281.98 in rental income during fiscal year 1982/1983, and handled all claims against the self-insured Municipal Railway. New claims filed against the Railway during the year were down 22% to 2,193, from the 1981/82 level of 2,820. Claims settled increased 18.5% to 1,633 over the previous year's 1,378. Total settlements and judgements amounted to $7.293 million, but 930 claims were denied.

Planning and Project Development completed the final draft of the Short Range Transit Plan FY 1983-1985, to include a Facilities Master Plan, which was adopted in June. A new diesel facility site on Harrison Street was acquired. An interim storage and maintenance facility was provided on Avis property at Third and Army Streets.

Since January, a series of organizational changes have affected the PUC Bureau structure.

Intensive review of the PUC personnel function resulted in creating Personnel and Training and reorganizing the critical functions of Position Control, Recruitment, Discipline and Affirmative Action. Emphasis is to develop standard procedures for these critical personnel functions.

Progress has been made on developing a manual position control system. Some 95% of the MUNI platform work force (2,200 employees) are now accounted for under a manual control system. This system of position control is being extended to all PUC employees and is expected to be in operation by early 1984.

Development of a standard procedure for processing new employees is behind original schedule. A recruitment policy has been issued to PUC managers, identifying the steps in the process, with senior personnel managers agreeing to the conceptual approach.

A draft policy for discipline guidelines and procedures has been prepared and is in final evaluation stages. Next phase will be producing final, written procedures for supervisors.

Utilities Engineering furnishes engineering and construction management services to PUC operating departments. UEB is comprised of five divisions: Project Management, Engineering Services, Construction Engineering, Contract Administration and Office Management. Under the newly instituted "Project Management" program, responsibility for UEB's some 130 projects is centralized under assigned project managers. A designated project manager oversees, each project from inception to completion and turn over to the user.

During the year, the UEB has managed the engineering, design and construction of many capital improvement projects including the Cable Car Restoration Program. In terms of long term impact and inconvenience to neighbors, the Cable Car System Rehabilitation Program has been the most visible Public Utilities Commission construction project this past year.

Since October, five construction contractors have been working on seven contracts to rehabilitate the Cable Car National Landmark, by removing and replacing the century old track and cable system and reconstructing the historic cable car barn. An eighth contract was awarded to purchase and install cable winding machinery and trackway components. The program is being coordinated by construction management consultants who in turn are monitored by UEB Project Manager Lynn Pio — budget $60 million.

Finance was reorganized to include Performance Monitoring to better support efficient and effective management of PUC departments and to provide a better linkage between performance measures and the budget. A new bureau manager was appointed during the Spring and the Bureau restructured in response to PUC needs. Grants and Budgets sections were consolidated and a new unit created to coordinate analysis, audits and performance monitoring.

Energy Conservation completed 17 public facility energy audits and substantial work on energy saving lighting improvements at City Hall, City Hall Annex, the Main Library and Hall of Justice. Reducing energy use in City and County operations reduces municipal expenditures and provides additional revenue to Hetch Hetchy through its increased capacity for resale.

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